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EXAMINER

HAMILTON, MONPLAISIR G

ART UNIT	PAPER NUMBER
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2135

DATE MAILED: 04/08/2004

6

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/908,947

Applicant(s)

KIRKWOOD ET AL.

Examiner

Monplaisir G Hamilton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. The communication filed on 1/23/04 amended Claims 7, 8, 11, 18, 21, 28, 31, 38, and 41. Claims 1-42 remain for examination.

Response to Arguments

2. Applicant's arguments, see paper No 5, filed 1/23/04, with respect to objections of Claims 1, 3 and 42 have been fully considered and are persuasive. The objection of Claims 1, 3 and 42 has been withdrawn.

Applicant's arguments filed 1/28/04 have been fully considered but they are not persuasive.

Referring to Claims 1, 12 and 22, 32 and 42:

Applicant argues: "Goiffon does not teach the feature of "in response to receiving the request, sending a response including information associated in the database with the first concept". In the cited section, col 14, line 65-col 15 line 10; col 15, lines 25-40, Goiffon teaches a system for providing search results for a word in a query and for variants of the word. In Goiffon, after submitting a query, the user must choose one or more variants from among a set of variants. A search is then performed on all of the selected variants and the search results are provided to the user.

In Claims 1, 12, 22, techniques are provided for, "in response to receiving the request, sending a response including information associated in the database with the first concept." That is, *after receiving a query, a normative concept for the query is determined ("the first concept"). The normative concept is then used to perform the search.* The techniques in Claims 1, 12, 22 refine the search results and provide only results for the

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normative concept, thereby automatically providing a refined, focused search without requiring the user to be able to pick or choose the normative concept among a set of word variants.

In Goiffon, on the other hand, after submitting a query, the user must choose one or more variants on a word in the query. A search is then performed on all of the selected variants, and the user receives a large set of unfocused results.

As Goiffon does not teach, among other things, the feature of "in response to receiving the request, sending a response including information associated in the database with the first concept," Goiffon could not possibly teach Claims 1, 12, or 22. For these reasons, the rejection is respectfully traversed."

Examiner disagrees with applicant. Goiffon discloses the claimed "in response to receiving the request, sending a response including information associated in the database with the first concept". Specifically Goiffon disclose a system wherein a user can specify a search term and the levels at which to perform the search (col 14, lines 45-65). Examiner believes the disclosed parent level is equivalent the claimed first concept. Therefore examiner maintains that Goiffon anticipates the claimed invention.

Furthermore, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., *after receiving a query, a normative concept for the query is determined ("the first concept"). The normative concept is then used to perform the search*) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

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Referring to Claims 2, 13 23, and 33:

Applicant further argues: "First, as described above, Goiffon does not teach a first, normative concept. Therefore, Goiffon could not possibly teach the features of Claims 2, 13, 23, and 33. Further, Goiffon does not teach, "storing in the database a second relationship of a second relationship type between the first concept and a second concept not among the first plurality of corresponding concepts, wherein the second concept indicates the information included in the response." Since Goiffon does not teach a normative concept, *Goiffon could not possibly teach storing a relationship between a normative concept and another concept and returning information associated with the second concept for a query that indicates the normative concept.* Therefore, since Goiffon does not teach, among other things, this feature, Goiffon could not possibly teach Claims 2, 13, 23, and 33."

Examiner disagrees with applicant. As noted above, examiner believes that the parent concept disclosed by Goiffon is equivalent to the claimed normative/first concept. Additionally, Goiffon discloses the use of word elements that are related to different concepts. These relationships represent varying uses of a word (col 13, lines 1-65); these relationships are not among the synonym or sub-concept relations. Therefore, examiner maintains that this disclosure of Goiffon is equivalent to the claimed "storing in the database a second relationship of a second relationship type between the first concept and a second concept not among the first plurality of corresponding concepts, wherein the second concept indicates the information included in the response."

Moreover, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., *storing a relationship between a normative concept and another concept and returning information associated with the second concept for a query that indicates the normative concept*) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the

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specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26

USPQ2d 1057 (Fed. Cir. 1993).

Applicant's arguments, see Paper No 5, filed 1/23/04, with respect to the rejection(s) of Claim(s) 4, 15, 25, and 35 under 35 U.S.C. § 102 (e) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of US 5740425 issued to Povilus.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-42 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5740425 issued to Povilus, herein referred to as Povilus.

Referring to Claims 1, 12, and 22:

Povilus discloses a method of responding to a request for data about an enterprise (col 3, lines 3-30), the method comprising the steps of:

storing a plurality of names for a single entity associated with the enterprise as a first plurality of corresponding concepts in a database of concepts and relationships among concepts (Fig 10-14), which database describes a plurality of entities associated with the enterprise (col 3, lines 10-25);

designating a first concept of the first plurality of corresponding concepts as a normative concept (col 7, lines 10-25);

receiving a request including data indicating a particular name of the plurality of names (col 8, lines 10-20); and

in response to receiving the request, sending a response including information associated in the database with the first concept (col 8, lines 10-65).

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Referring to Claim 32:

Povilus discloses a system for responding to a request for data about an enterprise, the system comprising:

a database of concepts and relationships among concepts describing a plurality of entities associated with the enterprise (col 3, lines 3-30); and a processor configured to perform the steps: of storing a plurality of names for a single entity associated with the enterprise as a first plurality of corresponding concepts in the database (Fig 10-14); indicating a first concept of the first plurality of corresponding concepts (col 7, lines 10-25); receiving a request including data indicating a particular name of the plurality of names (col 8, lines 10-20); and in response to receiving the request, sending a response including information associated in the database with the first concept (col 8, lines 10-65).

Referring to Claims 2, 13, 23 and 33:

Povilus discloses the limitations as discussed in Claims 1, 12, 22, and 32 above. Povilus further discloses:

storing in the database a first relationship of a first relationship type, the first relationship defined for the first concept and an alternative concept of the first plurality of corresponding concepts (col 6, lines 10-50); and

storing in the database a second relationship of a second relationship type between the first concept and a second concept not among the first plurality of corresponding concepts, wherein the second concept indicates the information included in the response (col 6, lines 10-25).

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Referring to Claim 3, 14, 24 and 34:

Goiffon discloses the limitations as discussed in Claims 2, 13, 23 and 33 above. Goiffon further discloses:

the request does not include data indicating a first name corresponding to the first concept (col 8, lines 5-20);

the particular name corresponds to a particular alternative concept of the first plurality of corresponding concepts (col 8, lines 15-35); and

the database does not include a relationship defined for the second concept and the particular alternative concept (col 7, lines 15-30; col 14, lines 30-65).

Referring to Claims 4, 15, 25 and 35:

Povilus discloses the limitations as discussed in Claims 1, 12, 22, and 32 above. Povilus further discloses, wherein the request does not include data indicating a first name corresponding to the first concept (col 8, lines 5-20).

Referring to Claims 5, 16, 26 and 36:

Povilus discloses the limitations as discussed in Claims 1, 12, 22, and 32 above. Povilus further discloses, wherein the plurality of names include at least one of a synonym for a first name corresponding to the first concept, an acronym for the first name, and a translation of the first name into a different language than a language of the first name (col 7, lines 10-30).

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Referring to Claims 6, 17, 27 and 37:

Povilus discloses the limitations as discussed in Claims 2, 13, 23 and 33 above. Goiffon further discloses, wherein the first relationship includes an attribute indicating the alternative concept is one of a synonym for the first concept, an acronym for the first concept, and a translation into a different language than a language of a first name corresponding to the first concept (col 7, lines 10-30).

Referring to Claims 7, 18, 28 and 38:

Povilus discloses the limitations as discussed in Claims 5, 16, 26 and 36 above. Povilus further discloses, wherein the plurality of names includes the synonym for the first name (col 7, lines 10-30); and wherein the synonym for the first name includes a misspelling of the first name (col 8, lines 25-60).

Referring to Claim 8:

Povilus discloses the limitations as discussed in Claim 5 above. Povilus further discloses, wherein the plurality of names includes the synonym for the first name (col 7, lines 10-30); and wherein a synonym for the first name comprises an acronym of the first concept or a translation into a different language than a language of a first name corresponding to the first concept (col 7, lines 1-15).

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Referring to Claim 9, 19, 29 and 39:

Povilus discloses the limitations as discussed in Claims 1, 12, 22 and 32 above. Povilus further discloses, adding a name to the plurality of names based on the data included in the request (col 36, lines 5-25; col 37, lines 15-55).

Referring to Claims 10, 20, 30 and 40:

Povilus discloses the limitations as discussed in Claims 1, 12, 22 and 32 above. Povilus further discloses, wherein the entities include at least one of a set of products of the enterprise, a set of services of the enterprise and a set of activities of the enterprise (col 3, lines 10-35).

Referring to Claims 11, 21, 31 and 41:

Povilus discloses the limitations as discussed in Claim 10, 20, 30 and 40 above. Povilus further discloses, wherein the set of activities of the enterprise include at least one of administration, research, marketing, joint ventures and documentation (col 10, lines 25-40).

Referring to Claim 42:

Povilus discloses a method of responding to a request for data about an enterprise using a data store that comprises a stored plurality of names for a single entity associated with the enterprise (col 7, lines 10-30), a first plurality of corresponding concepts in a database of concepts and relationships among concepts (col 6, lines 10-50), which database describes a plurality of entities associated with the enterprise, and wherein a first concept of the first

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plurality of corresponding concepts is identified as a normative concept (col 7, lines 10-30), the method comprising the computer-implemented steps of:

receiving a request including data indicating a particular name of the plurality of names (col 8, lines 5-20); and in response to receiving the request, sending a response including information associated in the database with the first concept (col 8, lines 15-45).

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1-2, 5-9-13, 16-23, 26-33 and 36-42 rejected under 35 U.S.C. 102(e) as being anticipated by US 6,453,312 issued to Goiffon et al, herein referred to as Goiffon.

Referring to Claims 1, 12, and 22:

Goiffon discloses a method of responding to a request for data about an enterprise (col 5, lines 20-25), the method comprising the steps of:

storing a plurality of names for a single entity associated with the enterprise as a first plurality of corresponding concepts in a database of concepts and relationships among concepts (col 4, lines 3-15), which database describes a plurality of entities associated with the enterprise (col 4, lines 4-8; col 10, lines 15-20);

designating a first concept of the first plurality of corresponding concepts as a normative concept (col 11, line 55-60; col 12, lines 1-35);

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receiving a request including data indicating a particular name of the plurality of names (col 14, lines 35-50); and

in response to receiving the request, sending a response including information associated in the database with the first concept (col 14, line 65- col 15, line 10; col 15, line 25-40).

Referring to Claim 32:

Goiffon discloses a system for responding to a request for data about an enterprise, the system comprising:

a database of concepts and relationships among concepts describing a plurality of entities associated with the enterprise (col 4, lines 1-20; col 5, lines 1-10); and a processor configured to perform the steps (Fig. 1): of storing a plurality of names for a single entity associated with the enterprise as a first plurality of corresponding concepts in the database (col 4, lines 3-15),); indicating a first concept of the first plurality of corresponding concepts (col 4, line 15-25; col 11, line 55-60; col 12, lines 1-35); receiving a request including data indicating a particular name of the plurality of names (col 14, lines 35-50); and in response to receiving the request, sending a response including information associated in the database with the first concept (col 14, line 65- col 15, line 10; col 15, line 25-40).

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Referring to Claims 2, 13, 23 and 33:

Goiffon discloses the limitations as discussed in Claims 1, 12, 22, and 32 above. Goiffon further discloses:

storing in the database a first relationship of a first relationship type, the first relationship defined for the first concept and an alternative concept of the first plurality of corresponding concepts (col 12, lines 1-35); and

storing in the database a second relationship of a second relationship type between the first concept and a second concept not among the first plurality of corresponding concepts, wherein the second concept indicates the information included in the response (col 11, lines 50-60).

Referring to Claims 5, 16, 26 and 36:

Goiffon discloses the limitations as discussed in Claims 1, 12, 22, and 32 above. Goiffon further discloses, wherein the plurality of names include at least one of a synonym for a first name corresponding to the first concept, an acronym for the first name, and a translation of the first name into a different language than a language of the first name (col 5, lines 15-25).

Referring to Claims 6, 17, 27 and 37:

Goiffon discloses the limitations as discussed in Claims 2, 13, 23 and 33 above. Goiffon further discloses, wherein the first relationship includes an attribute indicating the alternative concept is one of a synonym for the first concept, an acronym for the first concept, and a

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translation into a different language than a language of a first name corresponding to the first concept (col 5, lines 15-25; col 10, lines 15-20; col 11, lines 50-65; col 20, lines 55-65).

Referring to Claims 7, 18, 28 and 38:

Goiffon discloses the limitations as discussed in Claims 5, 16, 26 and 36 above. Goiffon further discloses, wherein the plurality of names includes the synonym for the first name (col 12, lines 10-35); and wherein the synonym for the first name includes a misspelling of the first name (col 13, line 60-68).

Referring to Claim 8:

Goiffon discloses the limitations as discussed in Claim 5 above. Goiffon further discloses, wherein the plurality of names includes the synonym for the first name (col 12, lines 10-35); and wherein the synonym for the first name comprises an acronym of the first concept or a translation into a different language than a language of a first name corresponding to the first concept (col 13, lines 60-68).

Referring to Claim 9, 19, 29 and 39:

Goiffon discloses the limitations as discussed in Claims 1, 12, 22 and 32 above. Goiffon further discloses, further comprising the step of adding a name to the plurality of names based on the data included in the request (col 21, lines 40-50; col 23, lines 55-67).

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Referring to Claims 10, 20, 30 and 40:

Goiffon discloses the limitations as discussed in Claims 1, 12, 22 and 32 above. Goiffon further discloses, wherein the entities include at least one of a set of products of the enterprise, a set of services of the enterprise and a set of activities of the enterprise (col 5, lines 15-25; col 23, lines 15-30; col 25, lines 60-68).

Referring to Claims 11, 21, 31 and 41:

Goiffon discloses the limitations as discussed in Claim 10, 20, 30 and 40 above. Goiffon further discloses, wherein the entities include the set of activities of the enterprise; and wherein the set of activities of the enterprise include at least one of administration, research, marketing, joint ventures and documentation (col 5, lines 15-25).

Referring to Claim 42:

Goiffon discloses a method of responding to a request for data about an enterprise using a data store that comprises a stored plurality of names for a single entity associated with the enterprise (col 4, lines 1-25; col 5, lines 3-20), a first plurality of corresponding concepts in a database of concepts and relationships among concepts (col 4, lines 5-20), which database describes a plurality of entities associated with the enterprise, and wherein a first concept of the first plurality of corresponding concepts is identified as a normative concept (col 23, lines 10-30), the method comprising the computer-implemented steps of:

receiving a request including data indicating a particular name of the plurality of names (col 14, lines 35-50); and in response to receiving the request, sending a response including

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information associated in the database with the first concept (Fig. 5; col 14, line 65- col 15, line 10; col 15, line 25-40).

Prior Art

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 6675159 issued to Lin, Albert Deirchow et al. Lin discloses a concept-based indexing and search system indexes collections of documents with ontology-based predicate structures through automated and/or human-assisted methods. The system extracts the concepts behind user queries to return only those documents that match those concepts. The concept based search and retrieval system comprehends the intent behind a query from a user, and returns results matching that intent. The system can perform off-line searches for unanswered user queries and notify the user when a match is found.

US 5386556 issued to Hedin, Erik B. et al. Hedin discloses a natural language (NL) analyzing system is provided with the capability to analyze NL expressions and to resolve ambiguities and present them to the user for verification of correct interpretation. A conceptual model of the system, relevant to the application in which the invention is implemented, is created (customizing the system) by the user, and is stored as a conceptual schema. The schema is built of logical facts representing entities (concepts) and relationships between entities, forming a description of the universe of discourse or object system in question. The entities of the schema have at least one external connection, namely to natural language terms in a vocabulary. The

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schema itself is completely language independent, though the components of it may have "names" expressed in a natural language such as English. There may be a second connection to the entities, namely where the system is used in a query system for relational databases. In this case the entities of the schema represent objects in the database, and thus there is a connection between the entities and those objects of the database. The actual analysis of NL expressions is performed by a natural language engine (NLE) in cooperation with an analysis grammar and the schema. The analysis results in an intermediate, language-independent logic form Representation of the input, which is paraphrased back to NL for verification. If the input is a query, there is a translation into a query language such as SQL.

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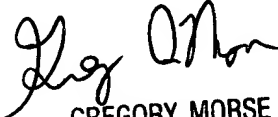
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monplaisir G Hamilton whose telephone number is (703) 305-5116. The examiner can normally be reached on Monday - Friday (8:00 am - 4:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y Vu can be reached on (703) 305-4393. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Monplaisir Hamilton


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